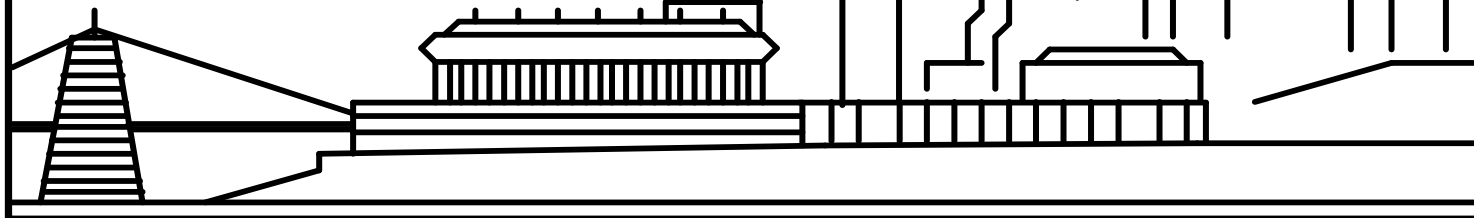




**INSTITUTE OF
ELECTRICAL &
ELECTRONICS
ENGINEERS, INC.**



JANUARY 1995

IEEE CINCINNATI SECTION NEWSLETTER

JANUARY MEETING Microsoft Windows 95 Overview

DATE: THURSDAY, JANUARY 26, 1995

PLACE: Institute of Advanced Manufacturing Sciences (IAMS)

**TIME : 5:30 (Social Time)
6:00 (Dinner)
7:00 (Program)
9:00 (Approx. - Adjourn)**

**COST: \$7.00 Members
3.00 Students
9.00 Non-Members**

Reservations are required for dinner only!
Please call Dee Scott at **385-9446**
by NOON, Wed. January 25th

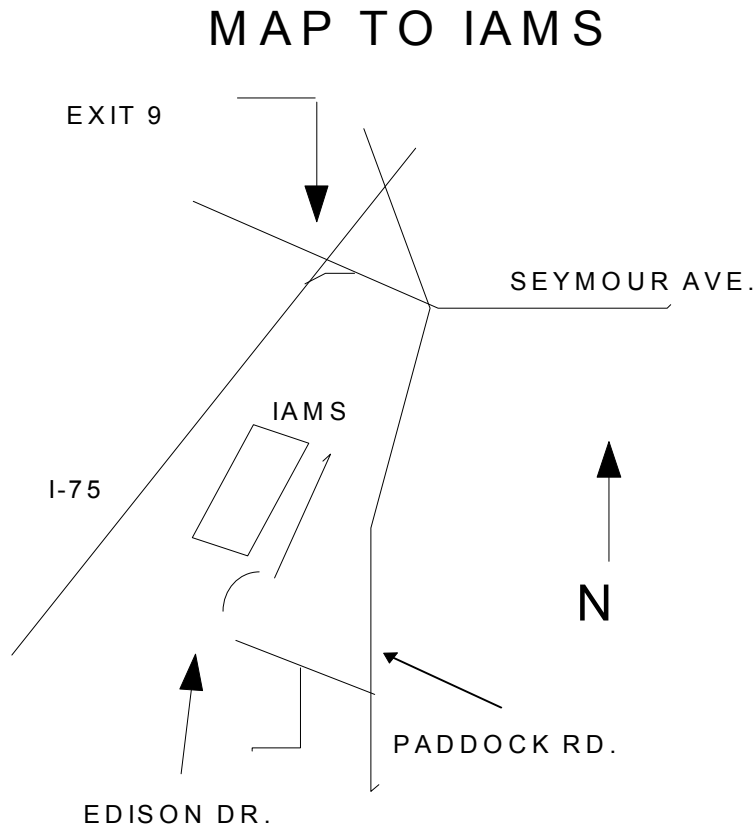
ABOUT THE PRESENTATION

In this special preview of Windows 95, Mr. Todd MacDonald a Microsoft Systems Engineer, will discuss and demonstrate the successor to Windows 3.x. This preview will showcase how Microsoft Windows 95 will make Windows easier to install, manage, and use in your corporation or home. The following topics will be covered in a lecture and demonstration format:

- Design Goals and Architecture.
- How Windows 95 makes personal computers easier to use.
- Application Support, Network Architecture.
- Connectivity.
- Mobile Computing Capabilities.
- Migration from Windows 3.x.
- Desktop and Network Management Tools.

A question and answer session will follow the presentation.

Mr. Todd MacDonald is a Systems Engineer II for Microsoft. He is a graduate of Xavier University and has been with Microsoft for five years.



CHAIRMAN'S MESSAGE *by Steve Olenick*

I would like to wish all our membership a "Happy New Year" and to congratulate the newly elected Cincinnati Section officers. Bob Haas is the new Vice-Chairman, Mark Reinick and Orest Melnyk remain as Secretary and Treasurer, respectively, Bill Jarzembksi is the new Member-At-Large and I am the new Chairman. We hope that we can continue to service the needs of the Cincinnati Section in a responsive and educational way.

Our last program on the Internet was very well attended and very educational. Professors Waldrop and Ciminero really showed some practical uses for the Internet that I never expected. Being able to get all of or most of your course material via the Internet is really a benefit to students. I also guess that I am somewhat jealous of their FIA (Full Internet Access) when I only have E-mail. I don't think I am ready to spend \$30 - \$50 per month to "surf" the Internet with Gopher and WWW. For 10 bucks, maybe ! I do find the E-mail very useful and would probably be very pleased with what Gopher and WWW have to offer if I had FIA at an affordable access cost.

To this end, the Executive Committee is actively looking at what level of service or aid we can provide to our membership at a reasonable price. I am not sure at the moment as to how this will unfold, but I believe we have enough creative minds in the group to pull this off. I welcome and ideas that you would like to explore or offer.

Please E-mail me at "Solenick@cinele.com" or fax me at 573-6514. I would also be interested in your "price pain" threshold. For you people that get the WWW free, notify me immediately and tell me how !

Do not miss our January 26th meeting. Randy Holt of NKU has arranged for Todd MacDonald of Microsoft to provide a sneak preview of "Windows 95." For those of you familiar with the Windows calculator, he may be able to explain the accuracy of your results when dividing by .01. If you have not tried the dinner before, it offers surprisingly satisfying and consistently good results -- unlike some floating point processors. I better quit before I get "flamed." Until next time.

TELEVISION SIGNAL -GENERATING TUBES

by

R. J. Reiman, Historian

Credit for inventing the first practical signal-generating, or pickup, tubes belongs to two electrical engineers, Vladimir K. Zworykin and Philo T. Farnsworth. Zworykin's invention was the iconoscope, which evolved into the imaging iconoscope, and Farnsworth's was the image dissector.

Vladimir K. Zworykin (1891-1982) was born in Russia as the son of an affluent ship-owning family. He studied electrical engineering at the University of Petersburg where he became a student of Boris Rosing, a pioneer in television picture tubes. Rosing disappeared during the Bolshevik Revolution of 1917, but Zworykin was able to escape to the United States in 1919. He was employed by Westinghouse as a research engineer, worked on the all-electronic television system, and was able to demonstrate the invention of the iconoscope in 1923. The quality of the pictures, better than from mechanical scanners, was poor, and funding was withheld until he received an audience with Sarnoff, since Westinghouse was partly owned by RCA. Sarnoff, himself a Russian immigrant, listened to the heavily-accented but impassioned description of the potential of the invention. "How much to develop a successful tube?" was the question, and the answer of \$100,000 was only off by \$49,900,000.

Many Westinghouse engineers, including Zworykin, were transferred to the RCA plant at Camden, New Jersey and Sarnoff promised financial support. Sarnoff purchased the Jenkin's Television Company, maker of mechanical systems, in order to receive their patents. By 1932, Zworykin had improved the iconoscope sufficiently to begin field tests. Although the sensitivity was low, it was better than its competitor's dissector. A further improvement allegedly used an imaging section which was similar to Farnsworth's dissector. After World War II, the image iconoscope, as the tube was now called, was replaced by the image orthicon, a product of wartime research and this in turn by the vidicon in 1954.

Philo T. Farnsworth (1906-1971) was born in Utah and educated at Brigham Young University where he majored in engineering. He opened a radio store in 1926, displayed creative genius, and was able to obtain financial backing. This led to his patent in 1927 of the image dissector. The image dissector did not develop sufficient sensitivity to be more than moderately successful. Although never a commercial success, its patent caused enough trouble for RCA that prolonged patent battles were avoided by RCA agreeing to expensive cross-licensing agreements with Farnsworth.

Sarnoff was later to pay Farnsworth a gracious tribute before a Senate hearing: "It is only fair that I should mention this - an American inventor who I think has contributed, outside of RCA itself, more to television than anybody else in the United States, and that is Mr. Farnsworth of Farnsworth television system."

IEEE NEWS

IEEE MEMBERS CHOOSE WALLACE READ AS 1995 PRESIDENT-ELECT

PISCATAWAY, N.J., Nov. 16 -- Wallace S. Read, president of the Canadian Electrical Association in Montreal and a former electric utilities executive in Newfoundland, has been elected 1995 president-elect of The IEEE. Dr. Read will begin serving as IEEE president on January 1, 1996. He is currently a member of the IEEE Board of Directors, now serving as vice president, Standards Activities.

This is the second time in the IEEE's history that a Canadian has been elected president. The first Canadian to hold the office was Robert H. Tanner, who served in 1972.

Of the 234,445 ballots mailed to IEEE voting members, 46,136 valid ballots (19.68 %) were returned. This compares with 20.72% in 1993.

Dr. Read was one of three candidates nominated by the IEEE Board of Directors for the office of president-elect. The other candidates were Charles K. Alexander, dean of the School of Engineering and Computer Science at California State University, Northridge, and Donald M. Bolle, professor of Electrical Engineering at Polytechnic University, New York.

Of the members who voted, 19,398 selected Dr. Read. Dr. Bolle received 18,785 votes, Dr. Alexander received 18,716 and write-in candidates received 198.

Dr. Read joined the Institute in 1952 and has been an active member. He served as a member of the Board of Directors from 1984-1985, 1988-1990 and 1993-1994; and as a Director for Region 7 from 1984 to 1985. He is a Fellow of both the IEEE and the Engineering Institute of Canada.

The results of the other Office elections are: Director, Division II - Pierre A. Thollot; Director, Division IV - Rolf H. Jansen; Director, Division VI - Stephen H. Unger; Director, Division X - Tzyh-Jong (T.J.) Tarn. They will all assume office on January 1, 1995.

Taking office on January 1, 1996 will be the following candidates selected as Director-Elect: Division V - Michael C. Mulder; Region 1 - Arthur W. Winston; Region 5 - John R. Reinert; Region 6 - John B. Damonte; and Region 7 - Linda E. Weaver.

Dee Scott (call for meeting reservations)	385-9446
Steve Olenick - Chairman	573-6555 (Office), Solenick@cinele.com (E-mail), 573-6514 (Fax)
Bob Haas - Vice Chairman	231-2584
Orest Melnyk - Treasurer	565-2549
Mark Reineck - Secretary	753-6290
Jack Beckmeyer - Arrangements Chairman	353-2643
Bill Jarzembksi - Member-at-Large	761-2551
Bob Morrison - Editor	287-3697 (Office), 287-3698 (Fax)

JANUARY 1995

IEEE CINCINNATI SECTION NEWSLETTER



**The Institute of Electrical and
Electronics Engineers, Inc.
C/O Dee Scott
7780 Hackney Circle
Maineville, Ohio 45039**

DATED MATERIAL
Please deliver promptly